

## Mark L. Franz

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### Education and Qualifications:

Ph. D. Civil Engineering  
University of Maryland, College Park, MD  
Expected Graduation Spring 2013  
Cumulative GPA 4.0/4.0

Engineer In Training  
December 2011

M.S. Civil Engineering  
West Virginia University, Morgantown, WV  
Graduated August 2009  
Cumulative GPA 4.0/4.0

B.S. Astronomy Cum Laude  
B.A. Physics Cum Laude  
University of Florida, Gainesville, FL  
Graduated June 2006  
Cumulative GPA 3.76/4.0

### Experience:

*University of Maryland, College Park, MD*

Graduate Research Assistant and Lab Manager.....1/10 – Present

- Researching the following topics:
  - Evaluation of automated speed enforcement in Maryland work zones
  - Real-time travel time estimation using Intelligent Transportation System (ITS) technology
  - Analysis and prediction of freeway incident duration
  - Dynamic dilemma zone protection system design and evaluation
  - Applications of variable speed limits in recurrent congestion
- Organizing meetings with collaboration partners such as consulting firms and Maryland State Highway Administration
- Assisting in research account oversight

*Independent Traffic Consultant, College Park, MD*

Traffic Engineering Consultant.....08/12 – Present

- Performed and reviewed traffic impact studies for proposed developments in the greater Washington D.C. metropolitan region

*West Virginia Local Technical Assistance Program, West Virginia University, Morgantown, WV*

Graduate Technical Assistant..... 8/07 – 8/09

- Developed training material for road agency audiences by researching industry standards including but not limited to: the Manual on Uniform Traffic Control Devices (MUTCD), American Association of State Highway and Transportation Officials (AASHTO) Green Book, Occupational Safety and Health Administration (OSHA) Standards and American National Standards Institute (ANSI) Standards
- Performed on site visits for West Virginia municipalities to resolve transportation issues
- Produced technical assistance reports by analyzing field data and by providing suggestions for improvement
- Analyzed data and provided recommendations to improve transportation system issues for low income communities with the West Virginia University Community Design Team

*Dr. Ron Eck, Ph.D., P.E., Engineering Consultant (Specializing in motorized and non-motorized incident reconstruction), Morgantown, WV*

Field Assistant.....12/07 – 8/09

- Performed slide to stop, sight distance, and crush measurement calculations for tort liability claims

**Activities:**

ITS Maryland Student Member.....9/09 – Present  
Chi Epsilon National Civil Engineering Honor Society Member.....4/09 – Present  
Golden Key International Honour Society Member.....10/08 – Present  
President ITS America, University of Maryland Chapter.....9/10 –10/11  
Vice President ITS America, University of Maryland Chapter.....9/09 – 9/10  
Institute of Transportation Engineers Member.....10/07–10/08  
National Local Technical Assistance Program National Conference.....7/07 and 7/08

**Honors:**

Engineer in Training.....12/11-Present  
Mid-Atlantic Universities Transportation Center Fellowship..... 8/12-Present  
UMD CEE Department Fellowship.....8/11  
A. James Clark (AJC) Fellowship Recipient.....8/09  
University of Florida Dean’s List.....8/03-4/06  
University of Florida Presidential Dinner for Outstanding Students.....4/05

**Publications & Technical Papers:**

Franz, M. Application of Variable Speed Limits in Recurrent Congestion. Ph.D Dissertation. University of Maryland, USA. Working Paper.

Chang, G.L., Peng, C., and Franz, M. A Review of Pedestrian-Vehicle Interactions at Urban Intersections. Working Paper.

Lu, Y. Park, S.Y., Franz, M., Yang, X. and Chang, G.L. Improving Traffic Safety At Rail Grade Crossings: A Case Study In Taiwan. Working Paper.

Chang, G.L., Liu, Y., Franz, M., Lu, Y., and Tao, R. ITS Application: Design and Evaluation of an Intelligent Dilemma Zone Protection System for a High Speed Rural Intersection. Transportation Research Board 92<sup>nd</sup> Annual Meeting. Washington, D.C. 2013.

Franz, M., and Chang, G.L. Effects of Automated Speed Enforcement in Maryland Work Zones. Transportation Research Board 90th Annual Meeting. Washington, D.C. 2011.

Kim, W., Franz, M., and Chang, G.L. Enhancement of Freeway Incident Traffic Management (FITM) and Resulting Benefits. Maryland State Highway Research Report. Report No. MD-11- SP009B4Q. Baltimore, MD. April 2012.

Franz, M.L. Local Agency Traffic Sign Retroreflectivity Case Study and Model of Observed Traffic Sign Light Intensity. Master’s Thesis. West Virginia University, U.S. 2009.

**References Available Upon Request**